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neoprene rubber which may be suitably reinforced using nylon, glass fiber or wire.

The flex loops 34 and 36 are sized to permit the movement of each flap from the desired closed position, as shown in FIGS. 2 and 3, to the desired open position of the nozzle as shown in FIG. 4 and in phantom in FIG. 2.

Since the seal means 28 of this invention is flexible and will conform to the shape of each flap 22 and the portion of duct 14 against which the seal abuts, the present invention alleviates the requirement for maintaining close tolerances as is required in the case of sliding seals, and enhances sealing effectiveness.

While the invention has been depicted and described in connection with a fan duct nozzle and is particularly applicable thereto because of the relatively low pressures and temperatures encountered within such a duct, it will be recognized that the invention is not limited thereto and may be effectively employed in core engine nozzles and confluent flow turbofan nozzles.

While a single embodiment of the present invention has been depicted and described, it will be appreciated that such is intended to be exemplary only and not definitive and that many suitable additions, changes or modifications may be made thereto without departing from the fundamental theme of the invention.

What is claimed is:

1. A variable area nozzle for a gas turbine engine of the type adapted to generate propulsive thrust by producing a motive fluid stream and effluxing same from a passage of said engine, said nozzle comprising:

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a plurality of flaps arranged in an annular array and hingeably connected to a supportive portion of said engine so as to define a downstream extension of and an outlet for said motive fluid passage;

means for pivoting each said flap about its hinge connection to vary the cross-sectional area of said outlet; and

seal means for preventing motive fluid leakage between peripherally adjacent ones of said flaps and at said hinge connections, said seal means comprising means forming a plurality of axial strips and an annular band having a preformed flex loop, said band secured on one side of said flex loop to said supportive engine portion and on the other side of said flex loop to said flaps, each said strip having a preformed flex loop and secured along its length to a respective pair of flaps with said flex loop disposed between said flaps, said flex loops sized to permit the desired pivotal movement of the flaps.

2. The structure of claim 1 further characterized in that said strips are integrally formed with said annular band forming means.

3. The structure of claim 1 further characterized in that said band is secured to said supportive engine portion and said flaps radially inwardly of said hinge connection.

4. The structure of claim 1 further characterized in that the flex loop of each said strip projects radially outwardly between its respective pair of flaps.

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